

A B S T R A C T

A transmitter emits into an intended search space a radar wave having a predetermined frequency pulse-modulated by a trigger pulse of a predetermined width.

5 A receiver receives a reflected wave of the radar wave and outputs a receive signal. A local pulse generator outputs a local pulse signal having the predetermined frequency pulse-modulated by the trigger pulse delayed by the delay unit. A correlation value

10 detector detects a strength correlation value between the receive signal and the local pulse signal. A delay time changing unit changes the delay time sequentially within a range of a predetermined period representing a generation period of the trigger

15 pulse. A correlation value storage unit stores the strength correlation value detected for each delay time changed. A frequency distribution generator generates a frequency distribution of a stored correlation value against the delay time. A search control unit executes

20 an analyzation for the intended search space based on a generated frequency distribution.